Applicant:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GILL et al.

Examiner:

Unassigned

Serial No.:

10/629,535

Group Art Unit:

2652

Filed:

July 29, 2003

Docket No.:

HSJ920030016US2

(HITG.054PA)

Title:

METHOD AND APPARATUS FOR ENHANCING THERMAL

STABILITY, IMPROVING BIASING AND REDUCING DAMAGE FROM

ELECTROSTATIC DISCHARGE IN SELF-PINNED ABUTTED JUNCTION HEADS HAVING A FIRST SELF-PINNED LAYER

EXTENDING UNDER THE HARD BIAS LAYERS

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence and the papers, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 21

Kathleen McDevitt

INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b))

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner.

This statement should be considered because it is submitted either within three months of the filing date or before the first Office Action of the above-identified application. Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), and the 05 August 2003 Official Gazette Notice, only a copy of each foreign document or non-U.S. patent/application listed on the enclosed Form 1449 is provided.

Please note that any notations or markings on the attached documents do not reflect

particular relevance, or lack thereof, to the present application, nor were they necessarily made by

anyone affiliated with the prosecution of the present application.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C.

§§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to

establish that the reference(s) are not "prior art." Moreover, Applicants do not represent that a

reference has been thoroughly reviewed or that any relevance of any portion of a reference is

intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of

M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked

as being considered and initialed by the Examiner, to the undersigned with the next official

communication.

Respectfully submitted,

Crawford Maunu PLLC

1270 Northland Drive

Suite 390

St. Paul, MN 55120

651/686-6633

Reg. No. 36,204

2

FORM 14		MATION DISCLOSURE STATEMENT	Docket Number: HSJ920030016US2	Application Number: 10/629,535	
/Q*		IN AN APPLICATION	Applicant: GILL et al.		
	~ h	(Use several sheets if necessary)	Filing Date: 07/29/2003	Group Art Unit: 2652	

EXAMINER INITIAL	DOCUME	NT NO.	DATE	NAME	CLASS	SUBCLASS	FILING IF APPRO		
	US 2002/01	54456 A1	10/24/2002	CAREY et al.					
	US 2002/014	49889 A1	10/17/2002	GILL					
- <u></u> .	US 2002/0154457 A1		10/24/2002	HORNG et al.					
	US 2002/0154455 A1		10/24/2002	LENSSEN					
	US 2002/0024780 A1		02/28/2002	MAO et al.					
	6,433,972		08/13/2002	MAO et al.					
	6,348,274		02/19/2002	KAMIGUCHI et al.					
-	6,252,750	6,252,750		GILL					
	6,324,037		11/27/2001	ZHU et al.					
	5,018,037		05/21/1991	KROUNBI et al.					
	US 2001/0004798 A1		06/28/2001	GILL					
	6,385,017		05/07/2002	MIN et al.	•				
	5,583,725		12/10/1996	COFFEY et al.					
	6,344,953		02/05/2002	KAUTZKY et al.			·		
	6,146,776		11/14/2000	FUKUZAWA et al.					
	US 2002/008	US 2002/0085323 A1		SMITH et al.					
	US 2001/0026425 A1		10/04/2001	MIYAZAWA et al.					
•			F	OREIGN PATENT DOCUME	NTS				
	DOCUMENT NO. JP11045415A		DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
							YES	NO	
			1999-02-16	JP			Abstract only		
-1.									
	T 1-1-4000 T	ОТН	ER DOCUMENTS	(Including Author, Title, Dat	e, Pertinent Page	s, Etc.)			
	July 1998 Takahashi, M., Maeda, T., Inage, K., Sakai, M., Morita, H., and Matsuzaki, M., "EDS Induced Pinned La Spin-Valve GMR Heads," <i>IEEE TRANSACTIONS ON MAGNETICS</i> , Vol. 34, No. 4,, July 1998.							eversal in	
	unknown	Hung, Silas Sensor Ind	ilas T., Wong, C.Y., Osborn, Mark, Kagaoan, Joel, Zhang, L.Z., and Bordeos, Randy, "A Study of GMR Read nduced by Soft EDS Using Magnetoresistive Sensitivity Mapping (MSM)."						

EXAMINER	DATE CONSIDERED						
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not							

considered. Include copy of this form for next communication to the Applicant.